

# **Lessons for East Africa from Food Aid Monetization:**

The Case of the 416(b)  
Small Farmer Recovery Program for Disaster  
Recovery in the Dominican Republic



by Kristy Cook  
Funding by USAID/REDSO and USAID/OFDA

**August 2001**

## Executive Summary

During the evening of September 20 and the morning of September 21, 1998, a hurricane of significant strength landed directly on the southern coast of the Dominican Republic. Estimates of food crops losses alone were around US \$278 million. This report examines one component of the response by the U.S. Government to the damage caused by Hurricane Georges: the U.S. Government food aid response, a donation under the 416(b) program. Under this program, donated wheat was monetized within the country and the proceeds were used to fund grant proposals concentrating on rehabilitation of small-scale farmers throughout the affected regions. Several aspects of this program are noteworthy as a successful disaster response and can serve as lessons for East Africa, where there are large concentrations of food aid.

USAID's Administrator, Brian J. Atwood, inspected hurricane damage within one week of the hurricane announcing a U.S. Government aid package of \$35 million including \$10 million in Title II, and 100,000 metric tons of wheat under 416(b). The 416(b) agreement was signed in December 1998, and the first shipment arrived in March 1999. The wheat was sold to two local millers in five shipments throughout 1999.

Generally, USDA has responsibility for the management of programs authorized under Section 416(b), however, existing staff from both USDA and USAID in Santo Domingo were fully occupied managing on-going programs and components of the emergency response, so USAID provided US \$1.87 million to a Participating Agency Service Agreement (PASA) with USDA. This PASA contributed to the success of the program through providing an in-country manager from USDA and technical assistance, training and guidance to the Government of the Dominican Republic in overall management of the program and the distribution of resources, monitoring, evaluation and documentation of activities related to the program.

The structure of the 416(b) program was important for its success. An agreement was reached to establish a Program Executive Council for management and evaluation of the program consisting of representatives from USDA, USAID, the Dominican Ministry of Agriculture (SEA) and the Dominican Technical Secretariat of the Presidency (STP). A grants program with applications from a broad range of organizations was proposed. All 100,000 MT were sold during fiscal year 1999 in accordance with the 416(b) agreement. The sales produced revenues of approximately US \$16 million (DR\$255 million pesos).

One of the most important outputs of the Program Executive Council was the development of guidelines and criteria for the proposals. A manual was developed by the Program Executive Council and distributed to all likely proposal applicants. The Proposal Manual identified the general objective of the program as providing technical and financial assistance to alleviate the hurricane damages through restoration of agricultural and livestock production and the food security of the affected population. The beneficiaries were specified to be small or medium sized farmers. Thirty-three proposals, totaling US \$16 million, were funded. In addition, the projects leveraged more than US \$8 million from public and private agencies in the Dominican Republic. Final disbursements were made in May 2001, and the program will be closed out by December 2001.

---

## Lessons Learned

---

*Monetization.* Many of the constraints which face monetization of food aid in East Africa were also present in the Dominican Republic, but these did not prevent a successful program. Lessons learned on the monetization experience indicated that a small market and lack of competition among firms for the use of wheat and wheat products did not prevent USDA from obtaining an acceptable price. The Dominican Government did not have much experience with managing auctions. An open negotiating table brought all parties together, increasing transparency. Shipping and monetization was not speedy, however, the program's success at rehabilitation and reconstruction was evident.

*Program development for rehabilitation and reconstruction.* The project structure facilitated clear criteria for the grants program and led to a wide proportion of the funds reaching the appropriate beneficiaries. The establishment of the Executive Committee with representatives from two U.S. and two Dominican agencies was a unique and important component of the management structure. The balance between donor and recipient government agencies was successful. Both USAID and USDA were able to advocate for small farmer support. Although difficulties resulted from working with a large number of smaller grantees, these problems were minimized through the grants process by ensuring that proper documentation existed and that project staff had minimum implementation capacity. The umbrella grant structure which is frequently used in East Africa was not necessary, but NGOs were encouraged to collaborate to ensure proper management and monitoring capacity.

Another important lesson learned from the Small Farmer Recovery Program relates to the focus of the project activities on rehabilitation activities with a mitigation emphasis. Disaster recovery should incorporate the best techniques and technologies available in order to incorporate disaster prevention and mitigation components. A focus on environmental rehabilitation in this case introduced and diffused forestry management techniques and soil protection measures, especially in areas with steep slopes. The rehabilitation of small-scale plantations provided an opportunity to introduce clean plant materials and reduce certain diseases. These rehabilitation activities will result in a more stable agricultural sector, that will be more resistant in the next hurricane disaster.

*Program organization and coordination.* The coordination between the agencies involved, particularly USAID and USDA, was critical for the success of the program. The investment in dedicated management was also necessary to facilitate the coordination of the four organizations which implemented the grants program. Although the exact configuration of these offices is rarely present in most East African countries, the important element was dedicated management oversight for the program, which cost less than 10 percent of the project funds.

## Introduction

During the evening of September 20 and the morning of September 21, 1998, a hurricane of significant strength landed directly on the southern coast of the Dominican Republic. The hurricane moved northwest starting from the capital city of Santo Domingo continuing through the fertile mountains into Haiti. For over 16 hours heavy rains and winds pommelled the country leaving 200 people dead and affecting the lives of over half of the population. The damage was significant and international response was immediate and large. U.S. Government response included immediate release of funds from the Office of Foreign Disaster Assistance, dispatch of assessment teams, and funding and technical assistance from USAID, USDA and other Agencies.

This report examines one component of the response by the U.S. Government to the damage by Hurricane Georges in 1998 in the Dominican Republic. The report focuses specifically on one component of U.S. Government food aid response, a donation of 100,000 metric tons of wheat under the 416(b) program. The donated wheat was monetized within the country and the proceeds were used to fund grant proposals concentrating on rehabilitation of small-scale farmers throughout the affected regions. Several aspects of this program are noteworthy as a successful disaster response and food aid program.

## Disaster Context

The Dominican Republic occupies two-thirds of a small island in the Caribbean; Haiti occupies the western part of the island. Though blessed with a tropical climate, enticing beaches, and countryside both pleasing to the eye and fertile for production, the island lies in a zone of tropical storms, which are frequently strong enough to become hurricanes. In 1998, Hurricane Georges swathed a path through the center of the country. The hurricane landed on the south-central coast causing significant damage to the capital city of Santo Domingo and continued through some of the most fertile coffee and cocoa producing areas of the central highlands, dislodging trees and causing landslides, destroying houses and crops, and causing the deaths of both people and their livestock.

The highest cost of damage occurred to infrastructure (schools, clinics, roads, bridges and houses) and electricity and communications infrastructure. Even two years after the event, roads and buildings remained unrepaired. Damage to the agriculture sector occurred to some export crops such as sugar, cocoa and coffee, but of greatest concern was damage to the traditional food crops (plantains, cassava, sweet potatoes and pumpkins). Plantains are the most important staple food crop for Dominicans. Estimates of costs for food crops were around US \$278 million. Small animals and livestock were also severely affected. There was extensive damage to the sugar sector, as much as 20 percent of cocoa plantations were destroyed, and 40 percent of coffee plantations. One-third of the rice factories, warehouses and irrigation systems suffered damage. And the cost to the country in produce that could not be harvested or delivered due to lack of access to markets as significant as that directly damaged.

The response to the damage created by Hurricane Georges was immediate and large. The U.S. contributed significantly as did other countries, and the Dominican Government also rechanneled resources. This report focuses on a component of the response in the agricultural sector, and particularly on one program which was targeted to small-scale farmers and agricultural infrastructure.

---

## **Dominican Agriculture**

---

Agriculture is important to the economy of the Dominican Republic. The sector contributes approximately 12 percent to gross domestic product and 40 percent of the population still live in rural areas. The most important crops are sugar, coffee, cocoa and horticultural crops. Livestock is important domestically as are other staple food crops such as plantain, rice and beans. The country has increasingly looked toward the international market, especially that of the U.S., to obtain a good return on agricultural products. Most importantly, the poorest people reside in the rural areas and agriculture is one means of increasing their incomes.

---

## **Hurricane Georges and the Impact on Dominican Agriculture**

---

Estimates by the U.S. Department of Agriculture indicated that damages to the agriculture sector were as high as 95 percent in some areas.<sup>1</sup> The official report from the Ministry of Agriculture estimated agricultural damages as high as \$255 million.<sup>2</sup>

Hurricanes affect agricultural crops through high winds which dislodge standing crops such as grain and sugarcane, uproot trees, drown and abandon livestock, ruin perishable inputs such as fertilizers and pesticides, destroy storage and processing facilities, and down electrical lines resulting in damage to perishable crops.

In the Dominican Republic, hardest hit was the plantain crop, a staple food. Over 50 percent of plantain and banana production were affected. Wind uprooted the crops and caused considerable dislodging. Prices of plantains increased as much as 100 percent. Another important food crop, rice, was significantly affected with a third of the factories, warehouses and irrigation systems suffering damage. Damage to roots and tubers, other staple food crops, resulted from heavy rain and flooding.

Many important export crops were also affected by Hurricane Georges. Sugar production was extensively affected – production is concentrated in the southeast, which was hit hard. Sugar stores were affected by water damage due to roof and building destruction. Two major sugar mills suffered damage. Citrus production was set back with production from the three largest commercial producers devastated. As many as 20 percent of the cocoa producing trees were destroyed and up to 40 percent of the coffee trees.

Although not all crops were destroyed, the lack of road access impeded sales of crops for many months. The damage to storage warehouses also impeded the collection and distribution of agricultural products. Infrastructure throughout the food production, marketing, and processing chain was damaged. Where structural damage compromised security, there was also considerable theft.

Large-scale production of livestock was not located directly in the hurricane's path and therefore was not seriously affected. However, poultry, another important domestic food crop item, was affected. More than 40 percent of live birds were reported to have been lost during

---

<sup>1</sup> USDA, Dominican Republic. Agriculture Situation, Post Hurricane Damage to Dominican Agriculture. 1998. GAIN Reports#15 and #DR8018. Prepared by Kevin N. Smith and Carlos Suarez. 10/1/1998 and 11/18/1998.

<sup>2</sup> Ibid.

the storm. But the lack of transportation was a major hindrance to the timely production, slaughter and sales of livestock products. In addition, the lack of electricity led to losses in some products and in livestock inputs such as vaccines. Overall, the losses in agriculture were more significant for smaller farming families located in the hurricane path, because they lost many of the animals on which they depended for food and sales.

## **U.S. Government Hurricane Response**

---

### **Immediate U.S. Government Emergency Response**

---

By the end of FY2000, the U.S. Government had contributed close to \$100 million to the Dominican Republic for hurricane response. Approximately \$5 million was funded within the first weeks following the disaster. The U.S. Government is able to respond quickly and has mechanisms which are flexible to provide appropriate assistance to many types of natural disasters. The most immediate needs following Hurricane Georges were in the areas of health and sanitation, shelter, food supply and infrastructure. USAID's Office of Foreign Disaster Assistance (OFDA) immediately released \$25,000 to the U.S. Charge d'Affaires to support the purchase of chainsaws, emergency construction materials and water purification supplies. Further assessment by OFDA led to the supply of plastic sheetings, body bags, chainsaws, water jugs and bladders. Within two weeks of the hurricane, OFDA had provided US \$2 million for emergency response. The Department of Defense provided eight helicopters to distribute supplies to remote and inaccessible areas costing approximately US \$1.2 million. Funds were provided to various other agencies such as the Pan American Health Organization, USAID, and the Peace Corps to support response efforts.

USAID's Administrator, Brian J. Atwood, inspected hurricane damage within one week of the hurricane announcing a U.S. Government aid package of \$35 million including \$10 million in Title II, and 100,000 metric tons of wheat under 416(b).

---

### **Recovery and Rehabilitation**

---

Many donors contributed funds to emergency response and rehabilitation. The World Bank provided an additional \$110 million in new funds. The Inter-American Development Bank reprogrammed \$50 million of its current portfolio and approved \$126.9 million for reconstruction. The European Union and other European donors provided approximately \$60 million.

USAID played a significant role in the coordination and implementation of the U.S. Government's program in recovery and rehabilitation developing a program within its country strategy. The Special Objective for Dominican Republic Hurricane Georges Recovery and Reconstruction was funded with \$6 million in Child Survival funds and \$1.5 million in Development Assistance from the USAID budget. Working closely with other agencies, programs were developed in health risk mitigation, shelter restoration, food supply restoration, and economic activity regeneration. Three areas were focused on to deal with health risks: water supply and sanitation, epidemiological and nutritional surveillance, and basic health and health education services. Shelter restoration was accomplished working with multiple organizations to repair and rebuild housing structures and train public and private sector representatives in disaster resistant housing.

Food supply was a critical concern in the aftermath of the hurricane. Over 600,000 people faced difficulties accessing food. The Title II food aid program contributed to two food distribution programs implemented by the American Red Cross and the World Food Program. A weekly supplemental ration was provided from March to August 1999. With help from the Dominican Red Cross, the American Red Cross distributed more than 100 tons of food, plastic sheeting and clean-up kits, and provided food for 156,000 people living in 14 provinces.<sup>3</sup>

In addition to these programs, the U.S. Department of Agriculture provided 100,000 metric tons of wheat under the Section 416(b) program. The sales of the wheat supplemented other imports of food products reducing price rises of food throughout 1999 until some recovery of the agricultural sector could increase food supply. Section 416(b) food assistance is not necessarily allocated for food emergencies; this example shows the value of this resource for the development of a post-disaster recovery program.

## **The 416(b) Program**

The major authorities for grant and concessional credit food aid are the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480) as amended, the Food for Progress Act of 1985, and Section 416(b) of the Agricultural Act of 1949. Public Law 480 has three “titles,” Title I (Government to Government concessional sales managed by USDA), Title II (donations or grants to recipient countries managed by USAID), and Title III (grants for economic development activities managed by USAID)<sup>4</sup>.

The program based on Section 416(b) provides for overseas donations of surplus commodities owned by the Commodity Credit Corporation (CCC) to carry out assistance programs in developing countries and friendly countries. Surplus commodities acquired by the CCC as a result of price support operations may be made available under section 416(b) if these commodities cannot be sold or otherwise disposed of without disruption of price support programs or at competitive world prices.<sup>5</sup> In general, the difference between 416(b) and Food for Progress (FFP) is intended – there should be greater need in the case of 416(b), but 416(b) requires the same conditions as FFP programs.

## **Development of the 416(b) Program in the Dominican Republic**

### **Program Development and Organization**

The objectives and organization of the program were worked out through cooperation between USDA’s FAS/Export Credits, FAS/Foreign Agricultural Affairs, FAS/International Cooperation and Development, and USAID/Dominican Republic working with the Government of the Dominican Republic. Generally, as described above, USDA has responsibility for the management of programs authorized under Section 416(b). However, both USDA and USAID staff in Santo Domingo were fully employed managing on-going programs and components of the emergency response, so an agreement was worked out between USAID and USDA whereby

<sup>3</sup> American Red Cross internet site: [www.redcross.org/world/americas/dr.html](http://www.redcross.org/world/americas/dr.html)

<sup>4</sup> The 1990 Farm Bill assigned responsibility of Title I to USDA and Titles II and III to USAID. All other programs are managed by USDA.

<sup>5</sup> USDA/FAS describes these programs on its website.

USAID provided US \$1.87 million from Development Assistance (DA)<sup>6</sup> funds to a Participating Agency Service Agreement (PASA).<sup>7</sup>

The purpose of the PASA was to provide technical assistance, training and guidance to the Government of the Dominican Republic in the overall management, distribution of resources, monitoring, evaluation and documentation of activities related to the program. Under the PASA, USDA/FAS hired a full-time employee (FAS Program Manager) to manage and provide oversight for the program in the Dominican Republic, working with the USDA/FAS office and the USAID mission. The PASA was signed in March 1999 and in April the USDA Program Manager was hired. The PASA also provided funding for management required by the Government of the Dominican Republic and for short-term technical assistance.

Both agencies agreed that the 416(b) funds should be allocated to agricultural rehabilitation and the program was titled the 416(b) Small Farmer Recovery Program. The structure of the 416(b) program was partly modeled on an on-going USAID PVO co-financing project. An agreement was reached to establish a Program Executive Council for management and evaluation of the program consisting of representatives from USDA, USAID, the Dominican Ministry of Agriculture (SEA) and the Dominican Technical Secretariat of the Presidency (STP). Although it was discussed whether the funds would be transferred to the Ministry of Agriculture directly, there was a strong push to have the funds directed toward the recovery of the small farm sector and ensure that non-governmental organizations were involved. The composition of the Program Executive Council helped to orient this program: USAID and USDA could advocate for small farmers. A grants program with applications from a broad range of organizations was proposed.

---

### **The Monetization of 416(b) Wheat in Santo Domingo**

---

In December of 1998, the U.S. and the Dominican Republic signed a 416(b) agreement under which USDA donated 100,000 metric tons of wheat. All 100,000 MT were sold during fiscal year 1999 in accordance with the 416(b) agreement. The sales produced revenues of approximately U.S. \$16 million (DR\$255 million pesos). The External Funds Office of the Technical Secretariat of the Office of the President (STP) was responsible to coordinate the sales in the Dominican Republic.

USDA provided STP with the names of six local millers and bakers who might be interested in purchasing wheat. The Secretariat published an announcement for closed bids in local papers requiring a minor advance payment. However, only two millers expressed an interest, and they submitted bids with conditions attached such as a discount, a 90-day credit and the ability to sell it to other suppliers. STP and USDA personnel worked with these offers, organizing a negotiating table, and ultimately were able to receive a satisfactory price. Despite some of the difficulties faced by the Secretariat, the total returns were higher than expected. The wheat arrived in five shipments and was sold in five auctions. The purchasers were responsible for receiving the wheat in the port and there were some problems with both the logistics of offloading (millers had to discharge wheat from gearless U.S. flag vessels which is more

---

<sup>6</sup> DA funds are those allocated to USAID under the Foreign Assistance Act

<sup>7</sup> A Participating Agency Service Agreement can be established between two agencies for one agency to access the skills and resources of another.



expensive) and the quality of the wheat (some of the wheat became spoiled through the process of discharging), but overall the transactions were completed successfully.

There was an urgent need to increase the food supply in the Dominican Republic following the hurricane as a significant proportion of domestically produced staple crops, especially plantains, had been destroyed. The American Red Cross distributed 12,170 MT of emergency commodities between March and August of 1999. WFP distributed 3,420 MT of emergency commodities during the first months following the hurricane. As roads and other transport infrastructure were cleared or reestablished, market access increased and the demand for food commodities increased. Wheat products are considered substitutes for some of the basic food items in the country, although preference is given in the diet to plantains, rice and beans. USDA staff maintain that the 416(b) wheat contributed to the stabilization of food prices, even though the first supplies arrived six months after the hurricane.

There were several difficulties highlighted with the monetization component of the 416(b) program. The first shipment did not arrive in Santo Domingo until March 1999, six months following the Hurricane. The Title II programs were implemented more quickly facilitating distribution to families who were food insecure. The 416(b) wheat filled a market niche following the immediate crisis, but was not useful to decrease short-term food insecurity. Some of the usual restrictions on U.S. food assistance did create issues, for example the use of U.S. carriers increases the freight cost of the grain and the type of loading mechanisms were difficult to accommodate in the local port – but these issues were overcome and overall the program kept within the monetization guidelines and generated sufficient funds for a successful rehabilitation program.

---

## **Counterpart Funds and Program Development**

---

### *Counterpart Funds*

The sales of the 416(b) wheat generated DR\$255 million pesos (approximately US \$16 million). The funds generated from the wheat sales were deposited into an account at the Central Bank, and the interest generated over the period of the sales went into program funds. The account was controlled directly by the Technical Secretariat of the Presidency (STP).

### *Guidelines and Criteria*

One of the most important outputs of the Program Executive Council was the development of guidelines and criteria for the proposals. A manual was developed by the Program Executive Council to be distributed to all likely proposal applicants. The Ministry of Agriculture held public meetings in all affected zones to publicize the availability of the funds and distribute the instructions for proposal development.

The Proposal Manual<sup>8</sup> identified the general objective of the program as providing technical and financial assistance to alleviate the damages caused by Hurricane Georges through restoration of agricultural and livestock production and the food security of the affected population. The beneficiaries were specified to be small- or medium-sized farmers with a maximum of 477 tareas<sup>9</sup> or 15 head of livestock. The specific objectives of the program were listed as:

---

<sup>8</sup> “Manual – Instructive para la elaboración de las propuestas por parte de las futuras instituciones ejecutoras” published by the Program Executive Council of the 416(b) Program, April 21, 1999.

<sup>9</sup> 1 tarea = 629 m<sup>2</sup>

1. The rehabilitation of agriculture and small-scale livestock production including meeting needs of small-scale farmers in land preparation and leveling; planting preparation; restoration of basic agricultural products, agricultural tools, and farming equipment damaged by the hurricane; restocking of small animal production; rehabilitation of livestock watering systems, fish raising facilities, and bees and bee hives.
2. The reconstruction of agriculture and small-scale livestock production including investments in small-scale production to maintain productivity and assure a successful harvest, post-harvest and sales of produce including the costs of reconstructing storage facilities, post-harvest costs, rehabilitation of access roads to cropping areas and the reconstruction of livestock watering systems, irrigation systems, containing walls, and drainage, and the reconstruction of electrical supply as well as the supply of agricultural inputs such as fertilizers.
3. Control, sanitary and phytosanitary protection, and market analysis with the objective of protecting small-scale producers from pathogens and other plant and animal diseases introduced by the hurricane. The focus in this area would be on public agencies and programs including infrastructure rehabilitation, identification training and management of pests and diseases. In addition, analysis of markets and prices including storage and transport costs to facilitate small-scale commercialization.
4. Stabilization of soils and catchment areas including methods promoted by local agricultural groups or communities to stabilize eroded soils and prevent damage to the newly reconstructed areas such as reestablishment of perennial plants and trees along rivers, valleys, roads and highways.

The proposal manual described a two-stage process by which the organization would present a pre-project proposal with a brief description of objectives, means, duration, location, beneficiaries and costs. In addition, a project plan and background on the implementing agency were requested. This pre-proposal was reviewed and revised by technical staff of STP and SEA with oversight by Program Executive Council and FAS Program Manager and then submitted to the Program Executive Council where a formal review was held. Once accepted, the implementing agency was requested to submit a more detailed project proposal/plan. Organizations could choose to submit the more detailed project plan as a pre-proposal as well.

The development of the proposal guidelines (manual) along with the dissemination of information about the program required considerable time. The manual was completed at the end of April and dissemination followed. The deadline for proposal submission was given as December 15, 1999; however, the number of proposals was so large, that the Program Executive Council cut off the proposal deadline on August 31, three months early. Over 150 proposals were received to be considered for funding.

### *Proposal Review and Selection*

Specific criteria were developed for proposal review and considerable effort was spent in developing a weighting system for each of the criteria. This process was time consuming and subject to debate, but several members of the Program Executive Council agreed that the transparency of the proposal review process was increased significantly through this process. One possible shortcoming expressed was that the submitting agencies and organizations did not sufficiently understand either the criteria or the weighting system. The Ministry of

Agriculture submitted proposals but was also on the Program Executive Council, which could have created a bias in program funding.

Eight criteria were proposed to assist in proposal selection:

- the location of the project,
- types of beneficiaries,
- number of beneficiaries,
- objectives and strategy of the project,
- length of implementation proposed,
- estimated costs,
- administrative, technical and financial capacity of the implementing agency, and
- institutional organization.

From a total of 100 points, some of the higher weights included: a large number of families (10 points for over 300 families), a small cost per family (10 points for less than RD\$15,000 (\$1,000) per family; classification of the objectives and activities as reconstruction and rehabilitation (7 points); own contribution by the project of 20 percent or more (6 points). In all, over 24 different proposal criteria were elaborated.

The proposal review committee selected 33 proposals for funding. Of the approved projects, 21 (64 percent) were from the private sector and 12 (36 percent) from the public sector (i.e., Ministry of Agriculture). Approximately 46 percent of the funding (according to funding amount) went to non-governmental organizations, whereas 54 percent went to public agencies.

---

## **Project Implementation**

---

*The Projects* There were 33 proposals accepted by the Program Executive Council for funding totaling US \$16 million. In addition, the projects leveraged more than US \$8 million from public and private agencies in the Dominican Republic. Approximately 30 percent of the organizations funded had prior experience with USAID funding and therefore were known to be familiar with project reporting, evaluation and accounting procedures. Many of the organizations who received funding were small community organizations, some linked to churches or religious organizations.

Grants were targeted to small-scale coffee, cocoa and fruit growers as well as small-scale sugar cane producers. Small-scale mixed farming was generally funded through community organizations, as was rehabilitation of rural roads, irrigation systems, canals and drainage. In addition there were several grants for agroforestry, reforestation, recuperation of protective barrier land, and restoration of soils. Many of the farming grants contained components which emphasized soil conservation, erosion control, and planting perennial crops and trees. It was estimated that the 33 proposals would benefit approximately 60,000 small- and medium-scale farmers in the hurricane affected areas.

### **Box 1: Association for the Development of San Jose de Ocoa**

A project in the Ocoa River Basin represents one type of the small-scale farming projects funded. The implementing organization, the Association for the Development of San Jose de Ocoa (ADESJO), has several on-going projects including a World Bank funded health project, education and other community related activities. The organization received US \$0.74 million for the integrated agricultural management of the Ocoa River. The project activities are largely located in the mountains above the Ocoa River. The slopes are steep and farming households are perched on ridges alongside rough roads, many of which are not all weather roads. The erosion as a result of the rainfall, winds and high flood water of the river can be clearly seen – large swaths of hillside fell away from the slopes, the river bed was widened and swept large quantities of river bank and trees down through the river basin.

The project worked with 450 farming families, most of which farm on steep hillsides. In particular the project addresses three elements: agricultural production, reforestation and conservation/erosion control.

Transportation of large crates of tomatoes and potatoes was in progress in November 2000 at the time of the field visit and other vegetables such as cabbage and beans were in various stages of growth. Several of the farmers were being introduced to organic production methods by the project (the inputs are considerably cheaper than chemical-intensive production), and most were managing erosion by implementing various types of barriers including rock fences or in one case, lemon grass rows. Several of the hillsides had been reforested with cedar, pines, and appropriate grasses. One of the trees most in demand was avocado, the fruit of which currently has a lucrative market in the U.S. for Dominican farmers. Some of the slopes which these farmers are planting appear to be too steep to farm, but the new methods will be more protective of soils, and the planting of perennial crops and trees is also more secure.

The largest grants were to the Ministry of Agriculture to strengthen agricultural health infrastructure (US \$1.33 million), reconstruct rice factories (US \$1.30 million), and to address the problem of the coffee berry bore (US \$0.9 million). The largest grant to a non-governmental organization was US \$1.57 million to rehabilitate and renovate cocoa production. The smaller grants were generally targeted to between 300 and 400 farming families. Box 1 shows an example of the activities of one project.

### ***Project Length and Disbursement Issues***

Most projects were approved and had received the first disbursement of funding in the first quarter of 2000. The project deadline has been somewhat determined by the funding for the PASA which finishes in September 2001. Although project length was limited to two years, most projects were designed as one year projects and will finish in mid-2001. Disbursements were delayed for some projects causing delays in implementation, but by the end of calendar year 2000 all projects had begun implementation. Some projects will face difficulties in completing activities and spending funds by the end of their project cycle. With the termination of the PASA, the granting of no cost extensions might not be feasible as management and monitoring and evaluation capacity will not exist. Under the Program Executive Council agreement, STP will provide a six month progress report until a zero balance is reached. Three cut-off dates were designated in the agreement: all projects received final disbursements by May 30, 2001; by September 30, 2001, all budgets must be spent; and by December 31, 2001, STP has to close out all project activities.

## *Monitoring and Evaluation*

The Program Executive Council is responsible for monitoring and evaluating the projects. In November 2000, all projects were required to submit project status reports with financial data in a formal presentation to the Council. These presentations indicated that projects have differing capacity to illustrate the achievements of their projects and differing understanding of the financial accounting. The technical representatives of the Program Executive Council (these staff are actually technical staff of STP and are funded through the overhead for STP) will work with those projects who did not present adequate information to ensure that the projects are on track and have sufficient financial accountability. The sessions did indicate that there are important achievements by the projects sometimes in the face of considerable constraints.

## *Project Constraints*

In the monitoring review sessions described above, the project managers listed several important constraints to the achievement of objectives. The primary constraint was the delay of the disbursement of funds which was partly due to a political transition in the country during which lines of authority were disrupted and decision-making was delayed. Drought and delay of rains was also an important impediment to project activities. In addition, the timing of funding created difficulties for the planting of some crops such as sugar which require specific planting times.

Another constraint was the lack of seeds, planting materials, and young animals, a deficit which could possibly have been overcome if the demand for these inputs had been anticipated. More planting material was required than was being produced by the nurseries and laboratories in the country. Since the source of these materials is in part public entities, the rehabilitation of these facilities should have been given priority. Imports could have been considered as an alternative source, although the phytosanitary and quarantine systems had not been rehabilitated and might not have been able to accommodate the materials.

Finally, a Presidential election in the Dominican Republic in 2000 delayed the appointment of many officials and impeded progress of the Program Executive Council as well as the implementation of most public projects.

## *Project Outputs/Impacts*

The project identified several important outputs and impacts as expected benefits of the activities. These include:

- Number of beneficiaries: 57,000
- Percent small-scale farmers: 100 percent
- Livelihoods maintained for small farmers; and
- Transformation of the agricultural sector.

The number of beneficiaries were identified by each project and aggregated to reach the total. Most projects targeted fewer than 1,000 farmers, but the coffee borer project expected to impact up to 30,000. This was the only project which had such a great number of beneficiaries. Given the resources per farmer, there is good reason to expect that at least 30,000 small

farmers received significant project benefit. Even the projects which funded government infrastructure redevelopment would have some benefit for small-scale farmers.

The projects were located exclusively in the affected zones which also served to ensure that the most affected farmers were targeted. Project proposals were reviewed closely to ensure that the organizations had a good base with small-scale farmers to ensure that this group was effectively targeted. Although there are many subsistence-oriented Dominican farmers, most produce some type of produce for sale. The crops targeted by the 33 projects are largely grown by small-scale agricultural producers, and many of the organizations funded generally work with small-scale farmers. Agriculture livelihoods are improved through the reconstruction of agriculture production.

The objective of transforming the agriculture sector is unusual for a reconstruction project. In the case of the activities reviewed within this project, however, many of the activities, especially in the area of environmental improvement and disaster mitigation, have the potential to create a more resilient and dynamic agricultural sector. The planting of perennial crops and reforestation on steep slopes will improve soil stability and reduce erosion. In addition, new and resistant plant varieties will improve farmer incomes and increase agricultural productivity. A final evaluation can more systematically document the contribution of the projects to agricultural transformation.

## Lessons Learned

### Monetization

Many of the lessons learned from the monetization process support lessons from other monetization efforts.

1. *Market size.* The small market in the Dominican Republic with very few large millers created a disadvantageous situation for the sale of the wheat. However, despite the entry of only two candidates for purchase, the negotiation round table set up by STP produced good cost coverage for the 416(b) program. This structure made the process more transparent in the case of a small number of bidders, and could be applied in countries in East Africa where this situation occurs.

2. *Monetization Experience.* There was limited experience in the Dominican Government with U.S. food aid, as the previous Title II program had closed out several years prior to the hurricane. There is a steep learning curve for government officials when faced with the regulations and conditions of these types of food aid programs. There was some experience in the Technical Secretariat of the Presidency and the staff committed significant time to understanding the process. Support was provided by the local USDA/FAS office. It is important to allow sufficient time, and to try to provide the technical assistance to this component of the program.

3. *Food Aid In Emergency Responses.* Section 416(b) is not appropriate for immediate emergency response, but the Small Farmer Recovery Program does demonstrate that it can be used very well for rehabilitation and reconstruction in a post-disaster situation which takes place over a one or two year period following the crisis. It is important to recognize that considerable institutional support was in place to implement the 416(b) program including a USAID

mission and a USDA/FAS office. However, the most important support came through the PASA. The USDA office served as an institutional base for the PASA manager and provided the manager and his staff with logistical and technical support. The USAID office could also have served this function. It is not clear that this model would function where USDA and USAID would not be present.

---

## **Program Development for Rehabilitation and Reconstruction**

---

1. *Rehabilitation and Reconstruction.* The program developed clear criteria by which to judge the projects, but none of these criteria except for “project length” attempted to define the difference between rehabilitation, reconstruction and development. In many institutions, rehabilitation and reconstruction are defined as returning a situation to a prior condition or state. In many of these projects, however, new cultivation methods and new materials were being introduced. For example, organic production was being promoted in some areas where there was little previous experience. Fruit trees were being supplied where they were not previously grown. This program illustrates that a disaster such as a hurricane can provide a unique opportunity to start over and correct previous imbalances or create new market opportunities. In areas where inappropriate crops are being produced, more appropriate ones can be introduced. Land can be converted from annual to perennial crops. Crop land can be returned to forests. Poorly managed forest areas can be reseeded by more sustainable means. Several of the projects illustrated the positive aspects of reconstruction and rehabilitation indicating that there is a constant need to revise the traditional definition of these terms and their application for project funding. As international markets increasingly shape agriculture in developing countries, these opportunities should be utilized to reorient the agricultural sectors where appropriate.

The public projects focused more on agricultural infrastructure such as phytosanitary inspection sites and laboratories. Although the funding was targeted at small-scale farmers, the need for public sector reconstruction became clear throughout the implementation of the projects. One of the laboratories was producing disease-resistant banana (plantain) rhizomes/suckers which became in high demand as projects demanded planting material. A few projects were delayed as the demand for hens and chicks outstripped the capacity of the Ministry of Agriculture to either produce or import them. Facilities to quarantine and inspect imported plants and animals were needed to assist in the reestablishment of the agricultural sector. The case study shows that a balance between support for public and private sectors needs to be struck in a post-disaster situation. This balance can be best achieved through examining the linkages between the two and identifying key needs in the supply chains. Bypassing government completely may create bottlenecks for successful recovery.

2. *Timing and Type of Response.* A specific difficulty for some of the projects was the indication from the target group that there were needs to be met in other sectors greater than those in agricultural rehabilitation. NGOs were frequently requested to meet needs outside their activity mandates. For example, with other programs not addressing health and water issues, some of the agricultural activities were difficult to pursue independently. In some cases, project organizations used other funds to invest in these activities. An important criterion for project selection was “own contribution.” NGOs have some flexibility with these funds. The timing of activities is critical to their success, since successful agricultural production requires that many other parts of the economic and social system are functioning well. In no case was it

recognized that the agricultural activities were not successful because other needs such as shelter or food were not being met.

3. *Organizational Readiness.* There is preliminary evidence that structure and experience of organization influence the effectiveness of the organizations. Some of the smaller organizations with minimal experience were having difficulties. Given the challenge of working in post-disaster contexts when there is considerable disorder and a lack of basic inputs, the technical and financial management capabilities of the organization might need to be a priority. Training could be conducted, but, in reality, project staff needs to be able to respond quickly with minimal organizational start-up. Some of the organizations were encouraged to create new partnerships to ensure minimal management capacity. At times this approach led to variable outcomes. One project manager diverted the project's transportation for personal uses leaving the smaller organization ineffective. This situation was resolved shortly after the incident, testing and supporting the effectiveness of the model of small-scale projects.

4. *Impact Assessment.* At least US \$16 million will be invested in the rehabilitation and reconstruction of small- and medium-scale agriculture in the Dominican Republic through the 416(b) program. It is appropriate to determine the significance of the impact of these investments. Monitoring and evaluating a large number of small projects is a time-intensive endeavor, especially when it requires considerable on-site training such as working with project staff in accounting or creating project plans. Currently, the projects can report on the number of farming families who are involved in the projects and some of the basic outputs, such as cropping area rehabilitated, coffee trees planted, and animals delivered. However, there is a difference between this type of output reporting and impact measurement, which relates more to the benefits such as incomes reestablished, environment rehabilitated and benefits sustained. Most of the projects do not have specific objectives with indicators or, most importantly targets, with the characteristics of quantity, quality and timing. There is no impact reporting required by Section 416(b), and there was considerable discussion by the partners on the type of indicators and the potential burden on the grantees. Given a lack of experience with indicators in the Dominican Republic and with these specific partners, expectations were modest, but each project was required to specify some targets.

For this study, a thorough review of all project documents was not performed and there exists undoubtedly more information on all projects. More assistance in monitoring would make these more accessible. An external monitoring contract might assist in this type of program with multiple grantees, especially given the short time frame for the program.

A final evaluation would be necessary to calculate the profitability of these investments, as well as their sustainability. If the project beneficiaries number 60,000, the average investment was US \$260 per beneficiary, in a country where per capita income is \$1,670.<sup>10</sup> Since many of the public projects do not directly benefit people but can have significant indirect benefits, average cost per beneficiary would decline if these were excluded. However, concrete achievements should be documented. The evaluation might be challenging because there is not a documented baseline in the case of many disasters. However, in areas where destruction was high, productivity increases could likely be measured from a zero baseline.

---

<sup>10</sup> World Bank, Dominican Republic at a Glance, 5/28/99



---

## Program Organization and Coordination

---

1. *Creative Institutional Structure.* Some of the most important lessons from this case lie in the creative institutional structure of the program which led to multiple partners agreeing on common objectives and management structures. These partnerships increased transparency, led to consensus building, brought all partners to the table, broadened support for the project, and made good use of technical skills.

The development of the Program Executive Council, which was composed of the two U.S. Government agencies and the two appropriate Dominican partner organizations, was tremendously successful in building consensus and increasing transparency. Although the need to build consensus appears to have prolonged certain processes such as the determination of project criteria and the selection of projects, some of the delays were outside the control of the Council (e.g., elections). This model should be considered for the East African context. In this case, USAID and USDA formed the constituency for small farmers and NGOs, but the support of the government was necessary. Where NGO or private sector representation can be accessed, this should be attempted.

2. *USAID and USDA Coordination.* The coordination between USAID and USDA was critical to the success of this program. The development of the PASA provided critical management input, local support and technical assistance. Dominican farmers will benefit in the reconstruction period from important agricultural expertise at a critical point in the rehabilitation of the sector. Some problems were exacerbated or initiated during the hurricane such as coffee bore and needed to be addressed quickly. The ability to tap into the expertise of USDA short-term assistance is an important advantage of the project structure. In this case, the technical assistance contributed to improving the disaster resilience and potential mitigation of future disasters.

The coordination with USAID also provided critical input in the program design. USAID has promoted the development of non-governmental and private organizations in several sectors and through their input, the model for a program targeted to smaller scale producers and non-governmental organizations was considered. The program accords with the objectives of USAID in the country and contributes significantly to the achievement of the strategic objectives outlined in the country strategy.

USAID was able to incorporate the section 416(b) resource effectively in its rehabilitation program. A Special Objective on Recovery and Reconstruction was formed with five intermediate results in the areas of health, shelter, food supply, economic activities and disaster mitigation. The result related to food supply focused on restoring food supply levels; the 416(b) program was the most important resource for achieving this result.<sup>11</sup> Given the focus on small farmers in the most affected areas, there is strong evidence that this program was an appropriate approach for restoring the food supply. As Dominican farmers are increasingly producing for the market, the reconstruction of small-scale export crops such as coffee and cocoa clearly contributes directly to farmer income and thereby to food security.

3. *The Importance of Management.* Programs with resources of this magnitude require considerable oversight. The funds which were invested in the PASA enabled full-time manage-

---

<sup>11</sup> USAID/Dominican Republic Hurricane Georges Recovery and Reconstruction Special Objective Document, April 4, 1999

ment expertise to be brought in, along with the necessary inputs to make it effective. The management component of the program was a small but absolutely critical component of the success of the project (around 10 percent). This program also demonstrates that food aid can be converted into useful rehabilitation and reconstruction programs in post-disaster situations, but that these commodities often require complementary resources to be most effective.

Table 1: Program Summary Data		
Generated Funds from Sale of Wheat		\$15,937,500
Total Project Approved (33)		\$15,929,046
Total Amount Obligated		\$15,929,046
Total Recipient Contribution		\$7,977,626
Overall Total Project Value		\$23,906,673
No of Projects	33	100%
NGO Projects	21	64%
Government Projects	12	36%

Source: USDA/FAS website [www.usemb.gov.do/416b/416bapp.htm](http://www.usemb.gov.do/416b/416bapp.htm)